



ABD Engineering & Design

Architectural Acoustics ▪ AV Design ▪ Noise & Vibration

Residential Mixed-Use & Hospitality

Statement of Qualifications

Acoustical Consulting & Audiovisual Design



ABD Engineering & Design

ABD Engineering & Design is an independent acoustical engineering and audiovisual design firm, proud to be a nationally and state (OR, WA) certified Women Owned business. We work with you to provide practical solutions with options that allow for informed decisions. Our timely communications and responsiveness give you the right information at the right time. The cornerstones of ABD's work include data collection on site, research, and calculations to deliver evidence-based designs. With decades of experience across multiple markets, and a team of consultants from varied backgrounds, you can count on ABD to bring you the best in audiovisual design and acoustical consulting.

At ABD, we strive to create a future where every day spaces meet the acoustical and audiovisual needs of every person. We are committed to providing an open, inclusive workplace where everyone, no matter what their background or where they come from, can learn and grow to their full potential.

Certifications

WBENC: WBE1701950

OR-COBID-WBE: 11342

WA-OMWBE: W2F0027557

WI-WBE: WI-13264



Professional Memberships

Acoustical Society of America

Institute of Noise Control Engineering

American Society of Testing and Materials

National Council of Acoustical Consultants

AVIXA (CTS-D)

Staff Count

Acoustics = 7

Audiovisual = 2

Leadership/Admin = 2

Contacts

Principal Engineer: Melinda Miller, PE mmiller@abdengineering.com

Contracts/Billing: Marci Boks, COO mboks@abdengineering.com

New Projects: Brian Atkinson, client@abdengineering.com

Incorporated: S-Corp incorporated 10/30/2001 in the State of Michigan

EIN: 38-3631490

DUNS: 104088682

NAICS Code: 541330

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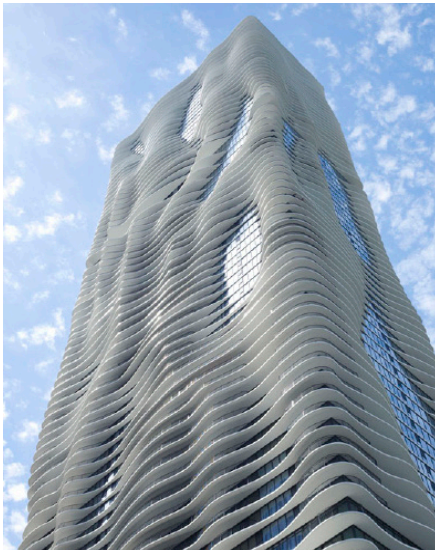
ABD Engineering & Design

Architectural Acoustics • AV Design • Noise & Vibration

Residential Mixed-Use and Hospitality

Acoustical Engineering and Audiovisual Design

At ABD Engineering & Design, we help design energetic, vibrant, lively spaces that comfortably co-exist with relaxed, peaceful, quiet environments. We test, analyze, and consult to ensure that developments mix unobtrusively with neighborhoods and the community and comply with local and regional environmental noise standards. We understand the unique challenges that noise and vibration from multi-tenant and multi-use projects pose, and we provide acoustical solutions for new construction, adaptive-reuse, remodeling, and retrofit projects – inside and out.



Acoustics for Mixed-Use Environments

Architects, engineers, and developers consult us, often early in the design, for expert acoustical analysis and solutions. Using measured noise and vibration data, engineering calculations, 3D models, and drawing on our professional experience, our acoustical engineers assess and predict potential noise problems in mixed-use developments. We analyze sound transmission, reverberation, absorption, reflection, vibration, isolation, and other acoustical challenges. Our assessment considers the potential



noise impact that entertainment, retail, hospitality, and public spaces will have on one another and on adjacent residential spaces and commercial offices. We consult on planning to avoid acoustically incompatible adjacencies, on the design of building partitions to isolate and negate distracting noise from interior and exterior sources, and on room finishes to absorb noise near the source and complement architectural aesthetics.

Audiovisual Systems Design

Our AV consultants and designers are experts at designing audio-visual, and technical solutions – customized for each type of setting – from nightclub, theater, and entertainment venues to in-store retail, commercial, and public gathering and meeting spaces. We understand the performance capabilities of multi-media, entertainment, and critical listening technology and its relationship and integration in mixed-use environments.

BIM Design

Building Information Modeling (BIM) is an intelligent 3D modeling and database-based process that gives architecture, engineering, and construction (AEC) professionals the insight and tools to more efficiently plan, design, construct, and manage buildings and infrastructure. ABD's design professionals use BIM as a collaborative design process, not just a documentation tool, making use of Cloud-based resources for smoother real-time collaboration with our partners. Our team performs QA/QC within the model for accuracy beyond what appears on a drawing or sheet. We're using Revit families for better visualization. This helps our clients gain insight into system performance, loudspeaker coverage, projection system geometry, and sight lines. ABD's BIM process also provides more accurate coordination with other disciplines including MEPS, lighting, furniture, and specialty equipment.

Exterior Noise and Vibration

ABD Engineering & Design conducts site evaluations and testing to assess the impact surrounding land uses will have on proposed developments. Likewise, we can study and assess the potential impact building mechanical systems, tenant venues, project associated traffic, and other project noise sources will have on the surrounding community. We develop solutions that meet the requirements of mandatory environmental impact studies and ensure comfort, inside and out.

Objective Recommendations

As an independent acoustical and AV consulting firm, we have no affiliations with or affinity for any particular brands, products, technologies, or suppliers. We bring objectivity and unbiased recommendations that are best suited to your facility – procured through a competitive bid process to ensure



superior designs at or below budget.

Experience

The ABD Engineering & Design team has extensive acoustical design and engineering experience. In addition, staff members have held teaching and research positions at various colleges and universities and regularly conduct educational seminars, conferences, workshops, and institutional training sessions on acoustics, and environmental noise and vibration control.

Green Design

ABD Engineering & Design is a leader in the acoustical and AV design community for creating sustainable facilities. Our own Green Initiatives put theory into practice to reduce our own corporate carbon footprint.



ABD Engineering & Design
Architectural Acoustics • AV Design • Noise & Vibration

Residential Mixed-Use and Hospitality

Selected Experience



1508 Woodward Mixed-Use
Detroit, MI

16th and Burnside Apartments
Portland, OR

18+Salmon
Portland, OR

48 West Student Apartments
Allendale, MI

820 Monroe Apartments
Grand Rapids, MI

Aqua Tower
Chicago, IL

Barley Flats
Grand Rapids, MI

Beacon Hill at Eastgate Senior Living
Grand Rapids, MI

Bowling Alley Residential Mixed-Use
Cleveland, OH

Central Lofts
Portland, OR

Central Michigan University
South Quad Housing
Mount Pleasant, MI

Clay+Tiffany Apartments
Portland, OR

Clifton Apartments
Portland, OR

Cosmopolitan Condos
Portland, OR

Crapo Building Adaptive Reuse
Bay City, MI

Emerald Flats
Grand Rapids, MI

Falcon Apartments
Grand Rapids, MI

Falcon Ridge
Reno, NV

Farmdale Apartments
North Hollywood, CA

Ferris State University
North Residence Hall
Big Rapids, MI

Ford Field Condos
Detroit, MI

Goldsmith Place
Portland, OR

Grand Belmont Apartments
Portland, OR

Grand Valley State University
Campus Housing - Allendale, MI
Glenn A. Niemeyer Honors Hall - Grand Rapids, MI

Gravity Mixed Use Tower
Gravity II Mixed Use Residential
Columbus, OH

Greenwich Condos
Portland, OR

Holland Home Residential Healthcare
Grand Rapids, MI

Indigo Hotel and Kirkland Tower
Vancouver, WA

Jantzen Apartments
Portland, OR

Jefferson Lofts Condominiums
Joseph, MI

Kelly/Lechert Apartments
Portland, OR

Kent State Hotel
Kent, OH

Kingsley Lane Lofts
Ann Arbor, MI

Little Caesar's Arena Mixed-Use Apartments
Detroit, MI

Mark Spencer Hotel
Portland, OR

Marriott AC Hotel Portland Downtown
Portland, OR

Milwaukie Mixed-Use
Milwaukie, OR



Multi Family Shipping Containers
Canby, OR

Multnomah Station
Portland, OR

Multnomah Village Apartments
Portland, OR

Ninebark Washougal Waterfront
Washougal, WA

North Point Willamette View
Salem, OR

North Richmond Apartments
Portland, OR

Nottingham Village Condos
Livonia, MI

NW 17th Mixed-Use Apartments
Portland, OR

Oak Crest Manors
Residential Healthcare
Holland, MI

Oak St Apartments
Tigard, OR

Overton 15 Apartments
Portland, OR

Raleigh 22 Mixed-Use
Portland, OR

Residential Fitness Center
Grosse Pointe Park, MI

Riverplace Parcel 3
Portland, OR

Rockwell Building
Chelsea, MI

Sheraton Portland Airport Hotel
Portland, OR

SW 3rd and Ash Apartments
Portland, OR

The Morton Apartments and Condominiums
Grand Rapids, MI

Titletown
Green Bay, WI

The Music Settlement Mixed-Use
Cleveland, OH

Torre Uno - Condo
Santo Domingo, Dominican Republic

Tower on the Maumee
Toledo, OH

Urban Institute for Contemporary Arts
The Gallery on Fulton
Grand Rapids, MI

View Point Inn and Wellness Center
Corbett, OR

Waters Building Offices and Hotel
Grand Rapids, MI

Wedgwood Residential Care
Living Room and Activities Gym
Grand Rapids, MI

Westgate Beaverton Creekside
Beaverton, OR

Willamette View
Milwaukie, OR

Ya-Po-Ah Terrace
Eugene, OR

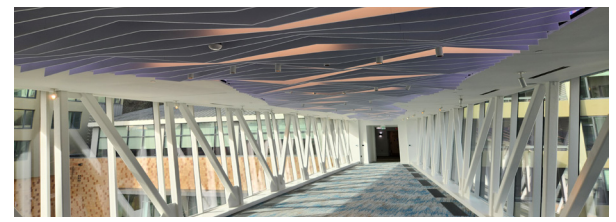
Yates Pointe Mixed-Use Development
Bend, OR

Yreva Bend House
Battle Creek, MI

This listing represents portions of the collective career experience of the ABD Engineering & Design Staff.



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Architectural Acoustics • AV Design • Noise & Vibration



Independent Living

Project Name Parkview at Terwilliger Plaza

Location Portland, Oregon

Size 370,000 SF

Budget \$110 million

Year Completed 2023

Description ABD Engineering & Design worked with LRS Architects on this high-rise independent living building with 11 floors and 127 units. The one and two bedroom units provide residential spaces for up to 250 residents. The sky bridge connects the new facility, with a modern take on the classic Art Deco movement, to the existing campus.

ABD started with an exterior noise study to gather data on the site from the bus line and roadway. We used that data to make recommendations for the facade to reduce interior noise levels. ABD's holistic acoustical recommendations included room acoustics to address echo and reverberation in the gathering spaces so residents can more easily have conversations. The interior noise isolation better separated spaces and provided privacy. Mechanical noise control reduced background noise levels, also helping in gathering spaces.



Multi-Family Apartments

Project Name **Cathedral Village Affordable Apartments**

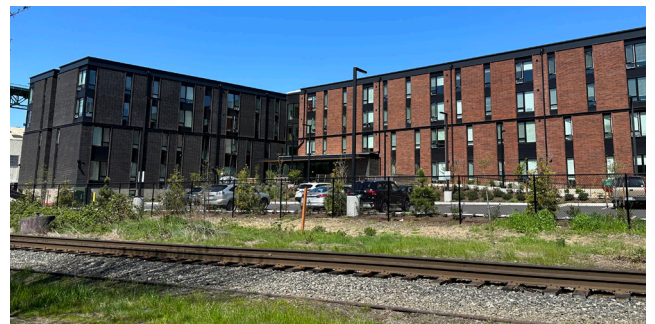
Location Portland, Oregon

Year Completed 2022
Size 94,535 SF

Description ABD Engineering & Design worked with MWA Architects to provide full acoustical consulting for this 110-unit affordable housing project. The development includes a mix of 2 and 3-bedroom apartments and a view of the St. John's Bridge.

The project needed to achieve a 45 dBA interior noise threshold. ABD conducted a site noise study to capture the frequency content and volume level of the noise sources nearby. We used that data to make recommendations for the building facade, roof deck, and window glazing performance. The proximity of the rail line required a vibration study to provide data for the structural engineer.

ABD's acoustics services also included recommendations for noise isolation to meet STC and IIC goals, room acoustics in common areas, and mechanical noise and vibration control for the mechanical systems.



Condominium Adaptive Reuse

Project Name **Jefferson Lofts**

Location St. Joseph, Michigan

Year Complete 2020

Description Jefferson Lofts Condominiums is a beautiful 22 unit development, just a few blocks from Lake Michigan, built in the St. Joseph landmark, Jefferson School.

The condominium association hired ABD Engineering & Design to help address sound transfer between units. ABD's acoustical consultants performed testing for airborne and impact noise in locations where owners were able to hear their neighbors voices, televisions, and footfall. After analysis of the as-built drawings, ABD provided recommendations for the construction needed to improve the noise isolation and impact insulation.

The Jefferson Lofts implemented ABD's recommendations and invited ABD back to measure the improved performance and compare our findings to other assemblies in the condominiums.



Photos courtesy of Superior Property Management LLC

Mixed-Use Multi-Family Apartments

Project Name **Grand + Belmont Apartments**

Location Portland, Oregon

Year Complete 2019

Description The Grand + Belmont Apartments is a 131-unit multi-family mixed-use residential project.

Ankrom Moisan Architects worked with ABD Engineering & Design early in the project to gain an understanding of the acoustical needs of the building. AMA incorporated ABD's acoustical engineering recommendations for floor/ceiling and wall assemblies to improve noise isolation (STC and IIC) between residential units, and between commercial and residential spaces.

ABD included noise and vibration isolation for the building mechanical systems and elevator, along with recommendations for controlling duct-transmitted, diffuser, and breakout noise, plus plumbing, and electrical noise.

The Grand + Belmont Apartments was awarded 1st place recognition in the Daily Journal of Commerce (DJC Oregon) Top Projects.



Hotel

Project Name	Marriott AC Hotel Portland Downtown
Location	Portland, OR
Year Completed	2017
Description	ABD Engineering & Design worked with SERA Design and Architecture and Motenson Construction to provide confirmation noise isolation and impact insulation testing to verify the quiet and comfort of this beautifully designed downtown hotel.



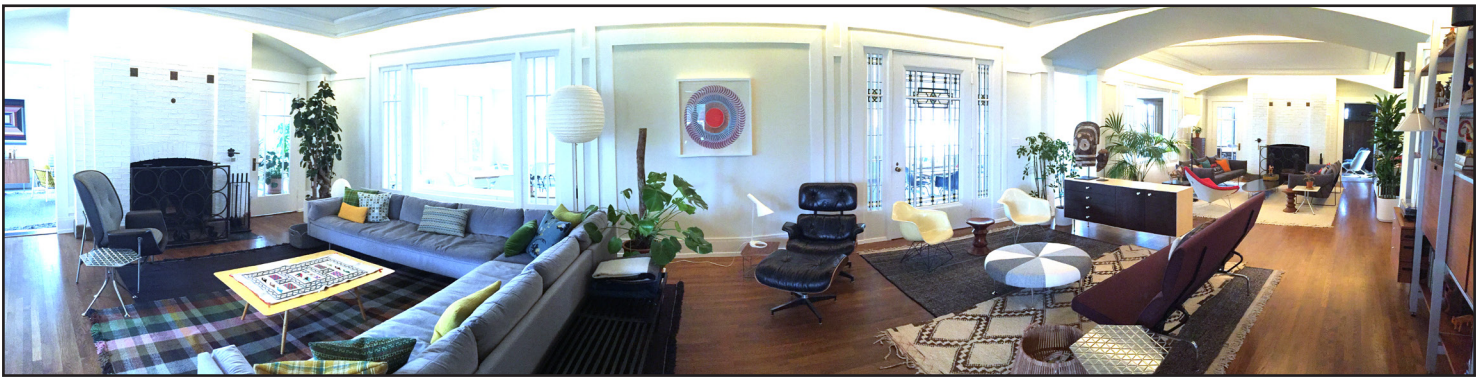
Corporate Retreat Center

Project Name **Herman Miller Marigold Lodge**

Location Holland, MI

Year Completed 2017

Description GMB Architecture + Engineering hired ABD Engineering & Design to provide acoustical consulting for the special needs of this historic Gold family waterfront home - turned corporate residential conference center. Of utmost importance was to have as little impact as possible on the architectural details, while still providing a comfortable acoustic atmosphere.



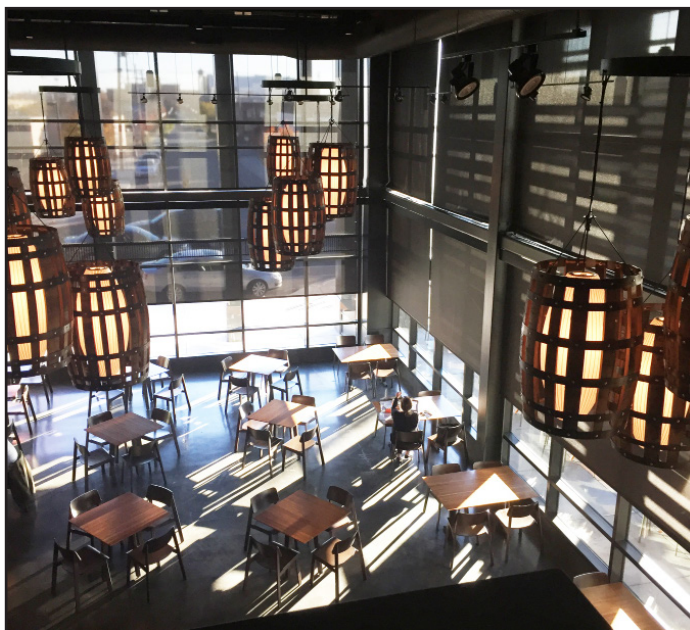
Brew-Pub Restaurants

Project Name **New Holland Brewery - Grand Rapids**

Location Grand Rapids, Michigan

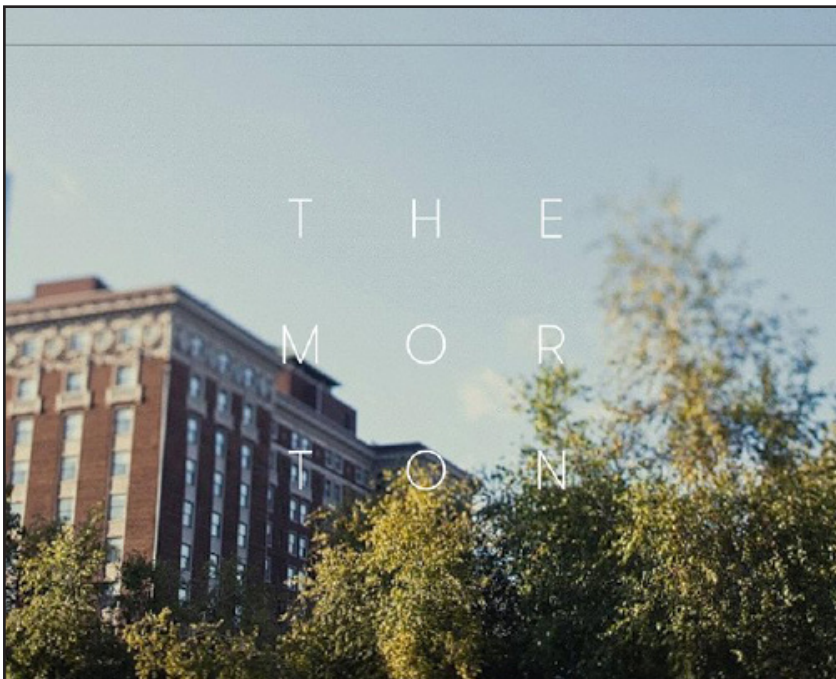
Year Complete 2016

Description Rockford Construction Co., Inc., and Architects, Fishbeck, Thompson, Carr & Huber, Inc., brought ABD Engineering & Design on as Acoustical Consultants for this brew-pub restaurant. The different spaces, including an indoor beer hall, outdoor beer garden, dining, and whiskey bar, each have a different atmosphere with unique acoustical needs. ABD Engineering & Design consultants modeled the spaces and provided recommendations for designs and acoustical treatments to achieve the "Stop, Taste" goals of New Holland Brewery's first expansion. The site is also home to a mixed use office, retail, and residential development requiring noise isolation and building systems noise control. ABD also provided AV systems programming for the displays and audio systems throughout.



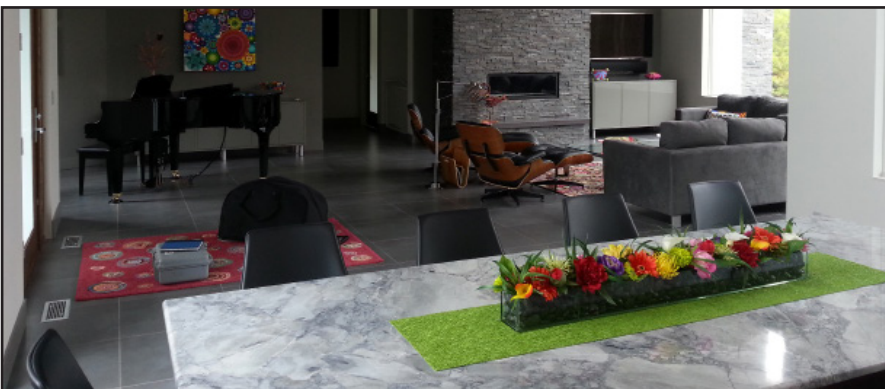
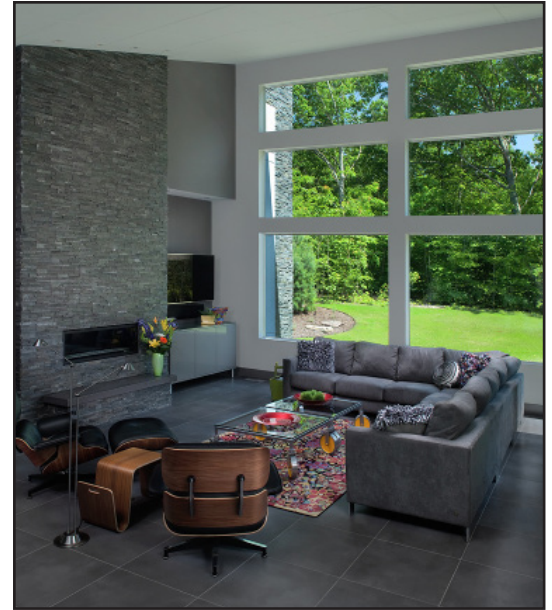
Condominium Mixed Use

Project Name	The Morton GR
Location	Grand Rapids, Michigan
Year Completed	2015
Project type	13 Story Mixed Use Renovation
Description	ABD Engineering & Design worked with Rockford Construction to provide noise and impact isolation evaluation of the existing 90+ year-old structure. Our professional engineers performed STC and IIC field tests throughout the existing structure and made recommendations for the new construction. Our recommendations included wall and floor-ceiling construction materials and methods to meet the exacting standards for condominium residents, along with apartments and retail. We followed up with site visits and testing to help meet the targets during and after construction.



Private Residence

Project Name	Raterink Residence
Location	Holland, Michigan
Year Completed	2014
Description	ABD Engineering & Design was hired to help improve the acoustics in this beautiful modern home. Current design trends including an open floor-plan and hard surfaces throughout the house can create harmful acoustic reflections that adversely effect the desired experience and home-life. Our professional engineers performed acoustic measurements and modeled the spaces to provide recommendations that improved the acoustics, but did not interfere with the aesthetic design.



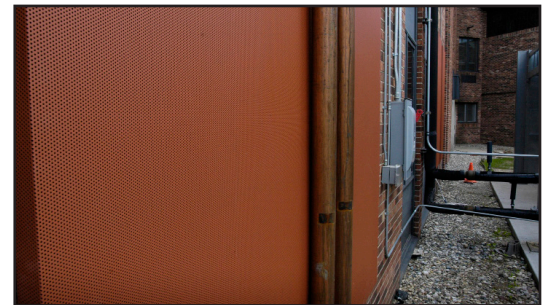
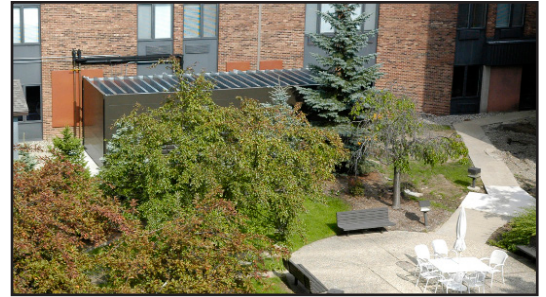
Residential Healthcare

Project Name **Holland Home
Residential Healthcare**

Location Grand Rapids, Michigan

Year Completed 2014

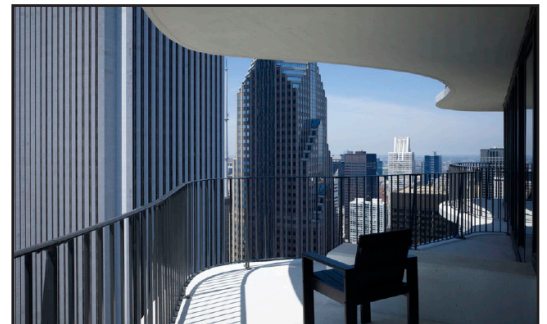
Description Holland Home contacted ABD Engineering & Design to address concerns from the residents regarding the HVAC noise in the courtyard. ABD provided acoustical measurements of the equipment, and took ambient noise measurements inside residences. Mitigation recommendations were described in our report to reduce the noise. Following construction of the prescribed enclosures and other measures, ABD was invited back to take follow up measurements, to show the reduction in mechanical systems noise.



Condominium Mixed-Use

Project Name	Aqua Tower
Location	Chicago, Illinois
Year Completed	2009
Size and Cost	82 Stories, 1.9 Million SF
Description	ABD Engineering & Design was brought in by Loewenberg Architects to offer acoustical consulting and noise isolation for Aqua, a new 82-story sky scraper in the heart of Chicago, Illinois. This mixed-use development houses residential condominiums, apartments, and parking space as well as a hotel, fitness center, and movie theatre. Sound isolation between units was a crucial factor for long term success.

Our professional engineers used 3D computer modeling software to thoroughly analyze and predict the acoustical attributes of the spaces. Before ground breaking, we made recommendations for construction features that would provide an appropriate amount of noise isolation between spaces. Our final report offered straight forward solutions for the complex acoustical challenges, and enabled Aqua to offer all the amenities of a classy, mixed-use development.



Hotel

Project Name	Country Inn & Suites By Carlson®
Location	Grand Rapids, Michigan
Year Completed	2008
Description	The Country Inn and Suites hotel is located close to the medical campus, convention center, tourism, and downtown Grand Rapids, serves travelers for a variety of travel needs. ABD Engineering & Design provided consulting to address the comfort of the guest rooms, and indoor pool. Services included Noise Isolation, Mechanical Noise Control, and Room Acoustics.



Residential Mixed-Use

Project Name	Family Recreation Building
Location	Ada, Michigan
Year Completed	2007
Description	<p>The Family Recreation Building is a multipurpose, residential building featuring a large gymnasium, movie lounge, bowling alley, kitchen, pool and hot tub all tied together into one dynamic entertainment venue. ABD Engineering & Design worked with A.M.D.G. Architects, Inc., to perform architectural acoustics and building systems noise control throughout the facility. Our professional engineers used a computer program called EASE to model the facility in 3D and predict its reverberation time in each of the spaces. They used this data and detailed calculations to determine proper room finishes and to attenuate the heating and air-conditioning systems noise. Their efforts, in conjunction with the rest of the design team, resulted in a great-sounding facility, free from excess reverberation and mechanical noise.</p>



Private Residence

Project Name	Private Residence on Lake Michigan
Location	Park Township, Michigan
Year Completed	2006
Description	ABD Engineering & Design was retained by A.M.D.G. Architects to offer acoustical consulting services for this private residential cottage. Our primary objective was to create a hospitable acoustical environment for entertaining. The client recognized the importance of good acoustics in creating a stress-free, relaxing environment, so designing this space with a pristine aural response was a must. Our professional engineers analyzed the ceiling plan and interior elevations in an effort to reduce noise disturbances, increase speech intelligibility, and create a warmer, less reverberant acoustical environment. After full implementation of our plan, the cottage became a relaxing environment for all to enjoy.





Melinda Miller brings her passion for all things sound and 20 years of experience to her role as Principal Engineer of ABD Engineering & Design. Her expertise includes diagnosing and preventing noise problems, designing acoustically optimized environments, and using evidence-based design practices. Melinda has consulted on projects involving architectural acoustics, noise isolation, mechanical noise control, and occupational noise exposure. Her experience includes higher education, K-12 schools, performance and worship spaces, healthcare facilities, industrial facilities, hotel and multi-family residential buildings.

A Professional Acoustical Engineer, licensed by the State of Oregon, Melinda earned her Bachelor's Degree in Mechanical Engineering from the University of Idaho, and Master's from the University of Illinois, Chicago. She has continued her education and training, earning her INCE Board Certification (INCE Bd. Cert.), Evidence-Based Design Accreditation and Certification (EDAC), and LEED AP BD+ C. As an Assistant Professor of Acoustics for Columbia College, she taught undergraduate junior and senior level classes in HVAC design, vibrations, acoustical testing, building noise control, and musical acoustics.

Melinda has chaired sessions on various topics at Noise-con and Inter-noise since 2013, and has served INCE as the Co-Chair of Building Acoustics Technical Activities committee, on the Certification Board since 2018, and the Board of Directors (2021-2024). Likewise, she has presented technical papers and education sessions for the Acoustical Society of America, the American Institute of Architects, and the Chicago Chapter of the Audio Engineering Society.

Professional Experience

- 2011-Present – Principal Engineer, ABD Engineering & Design, Inc., Portland, Oregon
- 2006-2009 – Acoustical Consultant, Listen Acoustics, Inc., Portland, Oregon
- 2003-2005 – Assistant Professor, Audio Arts and Acoustics Department, Columbia College Chicago, Chicago, IL
- 2001-2003 – Graduate Assistant, Acoustics and Vibrations Laboratory, Department of Mechanical & Industrial Engineering, University of Illinois Chicago, Chicago, Illinois

Professional Licenses and Memberships

- Acoustical Society of America
- Evidence-Based Design Accreditation and Certification (EDAC)
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- Institute of Noise Control Engineering (INCE), Certification Board, and Board of Directors
- National Council of Acoustical Consultants
- State of Oregon, Professional Engineer, #88158PE
- U.S. Green Building Council LEED AP BD+C

Education

- Master of Science in Mechanical Engineering, University of Illinois at Chicago, Chicago, Illinois, 2003
- Bachelor of Science in Mechanical Engineering, University of Idaho, Moscow, Idaho, 1998.

Project Experience

- | | | |
|--|--|---|
| • Indigo Hotel - Kirkland Tower, Portland, OR | • 523 E 3rd St, The Dalles, OR | • Argyle Apartments, Portland, OR |
| • Cosmopolitan Condos, Portland, OR | • Timberview Apartments, Villages at Beaver Creek, Oregon City, OR | • ERD Parcels 3, 7, 9, Eugene, OR |
| • 1122 SE Hawthorne, Residential Mixed Use, Portland, OR | • 2036 NW Canal Blvd, Redmond, OR | • K2 Apartments, Battle Creek, MI |
| • German Village, Residential Mixed Use, Columbus, OH | • Upshur Multifamily, Portland, OR | • Hawthorne Apartments, Cleveland, OH |
| • Flrekeepers Casino Hotel, Battle Creek, MI | • Lamont at Eason, Bend, OR | • Ninebark, Washougal, WA |
| • Bell Tower Hotel, Ann Arbor, MI | • The Highlands at Soldier Hollow, Midway, UT | • Washington Street Apartments, Vancouver, WA |
| | • Elmonica Apartments, Portland, OR | |





Erik J Geiger has designed and consulted on audio, video, and technical systems for over 20 years. He has served as an Audiovisual discipline leader and project manager, and carries a wealth of technical system consulting and design experience. Erik brings the heart of a teacher to every project, helping clients and end-users to understand a rapidly changing environment — having held a position at Columbia College, Chicago for many years.

Erik specializes in planning, budgeting and needs analysis studies for audiovisual and media technology-based systems, with a focus on facilities and infrastructure planning to provide life cycle value and long-term cost savings through accommodating future technologies, some of which may only be emergent.

Erik has designed large scale facility-wide audio, video and media distribution systems, leveraging IT network topologies and convergence, as well as high performance sound-reinforcement and large-scale video display systems, recording and media post-production facilities. He has designed interactive and collaborative communications environments, that both augment and move beyond the traditional audio and video conferencing space. He has worked on projects in healthcare, university, K-12 education, and corporate environments, along with auditoriums, convention centers and hospitality venues around the world.

When Erik isn't designing technical systems, he enjoys playing the piano, backpacking, cycling, and photography.

Professional Experience

- 2016-Present – Director of Audiovisual, ABD Engineering & Design, Inc., Portland, Oregon
- 2011-2016 – Senior Associate, Shen, Milsom & Wilke, LLC - Chicago, Illinois
- 2007-2014 – Adjunct Professor, Audio Arts & Acoustics, Columbia College - Chicago, Illinois
- 2009-2011 – Owner, Geiger Design Consultants - Chicago, Illinois
- 2004-2009 – Associate, Shen, Milsom & Wilke, LLC - Chicago, Illinois
- 1998-2004 – Arnold & O'Sheridan, Inc. - Madison, Wisconsin
- 1995-1998 – Hammel Green & Abrahamson, Inc. - Minneapolis, Minnesota

Professional Certifications and Memberships

- AVIXA (InfoComm International), Certified Technical Specialist
- CTS-D
- AVIXA (Infocomm) Infrastructure Standards working group

Education

- Mass Communications, University Of Wisconsin – Madison, Wisconsin
- Audio Recording and Production, Musicians Technical Training Institute – Minneapolis, Minnesota.

Project Experience

- | | | |
|---|---|--|
| • Portland Community College, Cascade Campus, Public Service Education Building, Portland, OR | • Moreland Presbyterian Church, Sanctuary, Portland, OR | • University of Montana, Early Childhood Education Center, Missoula, MT |
| • Oregon State University, Fairbanks Hall, Corvallis, OR | • Port of Vancouver, Commission Room, Vancouver, WA | • Muskegon Community College, Arts and Humanities, Theater Music and Art, Muskegon, MI |
| • North Eugene High School, Eugene, OR | • Clackamas Community College, Barlow Hall, Automotive, Oregon City, OR | • South Christian High School, Grand Rapids, MI |
| • City of Ukiah, Council Chambers, Ukiah, CA | • The University of Providence Great Falls, University Center, Great Falls, MT | • University of Oregon, Autzen Stadium, Eugene, OR |
| • Kaiser Permanente, North Lancaster Medical Office Building, Salem, OR | • Central Michigan University, Center for Integrated Health Studies, Mount Pleasant, MI | |



Peter Allen is a senior acoustical engineer with a Master of Engineering degree in Acoustics and over 20 years of experience in the field of acoustics. Peter has been with ABD Engineering & Design since 2016 and provides consulting services on a wide-range of projects types, including education facilities, healthcare facilities, worship spaces, hotels, and multi-family housing, while also specializing in vibration testing and analysis.

Peter uses an evidence-based, data-driven approach to provide acoustical recommendations to clients. Whenever possible, his recommendations include multiple options to help clients meet their aesthetic and budgetary constraints. He has presented his work at various industry symposia as well as at the annual conference for the

Institute of Noise Control Engineering.

Prior to joining ABD, Peter worked as an acoustical consultant at Daly-Standlee & Associates for eight years, where he learned to apply his skills from a research environment to the field of acoustical consulting. He began his career at Southwest Research Institute (SwRI), where he worked for ten years. There, he managed technical projects in vibration analysis, noise control, and environmental testing for clients in the electric utility, telecommunications, aerospace, automotive, and building industries. He taught technical courses within the organization to further develop the skills of others in the organization.

In 2005, Peter obtained his Master's Degree of Engineering in Acoustics from Pennsylvania State University, and he has used his additional education to focus his efforts on the use of field testing and analysis to solve noise and vibration problems. In his personal time, Peter enjoys climbing, yoga, riding his motorcycle, and SCUBA diving.

Professional Experience

- 2016-Present – Senior Acoustical Engineer, ABD Engineering & Design, Inc., Portland, Oregon
- 2008-2016 – Senior Acoustical Engineer, Daly-Standlee & Associates, Portland, Oregon
- 1998-2008 – Senior Research Engineer, Southwest Research Institute, San Antonio, Texas

Professional Licenses and Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- National Council of Acoustical Consultants
- State of Oregon, Professional Engineer #84392PE

Education

- Master of Engineering in Acoustics, Pennsylvania State University, State College, Pennsylvania, 2005
- Bachelor of Science in Engineering, Electrical Emphasis, Texas Christian University, Fort Worth, Texas, 1998.

Project Experience

- | | | |
|---|--|--|
| • Beaverton Health & Science School, Beaverton, OR | • Lakeridge High School, Lake Oswego, OR | • USANA Sciences Company, Packaging Area, Valley City, UT |
| • Jesuit High School, Portland, OR | • Ron Russell Middle School, Portland, OR | • TriMet, Columbia 10, Portland, OR |
| • Kaiser Permanente:
-Hybrid Operating Room, Clackamas, OR | • Tukes Valley K-8 School, Battleground, WA | • St John Fisher School, Gym Noise Isolation, Portland, OR |
| -Salmon Creek MRI, Vancouver, WA | • West End Surgical, Beaverton, OR | • Bendix, Relocation Noise and Vibration, Avon, OH |
| -North Lancaster MOB, Salem, OR | • Yates Pointe Mixed Use Development, Bend, OR | |
| -Clackamas Eye Care MRI, Happy Valley, OR | • Zoom+, Bridgeport Village Clinic, Portland, OR | |



Jeremy Bielecki is a Senior Acoustical Consultant with over 20 years of experience as a consultant, and as a project manager for over 300 building projects. Jeremy has worked in acoustics in the Midwest and Pacific Northwest on projects including healthcare, higher education, workplace, performance spaces, K-12 education, athletics, and multi-family residential.

Jeremy possesses a strong work ethic and creative problem solving skills that have served him and his clients well. Knowing he always wanted to be in engineering and involved with music, Jeremy found acoustics to be the marriage of the two. He gains tremendous satisfaction from being part of a project that starts with lines on a screen and words on a page, eventually becoming a physical space you live within, and get enjoyment from.

Over his career, Jeremy has developed expertise in performing field measurements, creating complex computer prediction models, and analyzing data and drawings to identify primary causes and contributors to noise and vibration problems. He also determines sound isolation ratings, HVAC system noise ratings, and room acoustic performance using reverberation time, acoustical clarity, and speech intelligibility metrics.

In his spare time, Jeremy is a skilled piano tuner and repair technician, musician, and coaches soccer and robotics. He also enjoys 3D printing, and cooking with his family.

Professional Experience

- 2022-Present – Senior Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2005-2022 – Acoustical Consultant, Kolano and Saha Engineers, Inc., Waterford, Michigan
- 2001-2004 – Acoustical Engineer, Michael R. Yantis Associates, Inc., Seattle, Washington

Professional Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

Education

- Bachelor of Science in Mechanical Engineering, University of Michigan, Ann Arbor, 2000.

Project Experience

- | | | |
|--|--|---|
| • Munson Medical Center
Traverse City, MI | • *Michigan State University, East
Lansing, MI
Broad Art Museum
STEM Power Plant Renovation | • *Charles H Wright Museum
of African American History,
Detroit, MI |
| • *St. John Hospital, Detroit, MI | • *Henry Ford Community College,
Recording Studio, Dearborn, MI | • *Emagine Theaters, Royal Oak,
MI |
| • *Detroit Pistons Performance
Center, Detroit, MI | • *Kendall College of Art and
Design, Grand Rapids, MI | • *Residence Inn by Marriott,
Grand Rapids, MI |
| • *Greektown Casino Hotel,
Detroit, MI | • *Davidson Foundation
Development, Bloomfield Hills,
MI | • *Bharatiya Temple, Troy, MI |
| • *University of Michigan, Ann
Arbor, MI
Law School: Hutchins Hall,
Jeffries Hall
Student Union
Central Campus Recreation
Building
Beyster Building Addition
Munger Student Residences | • Romeo High School, Auditorium,
*Romeo, MI | • *The Mid: Co-Living, Detroit, MI |
| • *Central Michigan University,
Mount Pleasant, MI
Grawn Hall
Ronan Hall | • *Byron Center High School,
Byron Center, MI | • *New Beginning Baptist Church,
Waterford, MI |
| | • *Ann Arbor School of the
Performing Arts, Ann Arbor, MI | • *Cobo Center, Detroit, MI |
| | • *Toyota Technical Center, Quiet
Room, Ann Arbor, MI | • *Patrick V. McNamara Fitness
Center, Detroit, MI |
| | | • *Theodore Levin U.S.
Courthouse, Detroit, MI |

*Some project experience is prior to employment at ABD

Benjamin Wolf

Senior Acoustical Consultant
INCE Bd. Cert. bwolf@abdengineering.com



Benjamin Wolf is a Senior Acoustical Consultant with a Master of Science in Architectural Acoustics from Rensselaer Polytechnic Institute. He specializes in analysis and recommendations for the spaces and structures needed to provide acoustically effective and comfortable environments.

Ben joined ABD Engineering & Design, Inc. in 2016 after four years with Daly-Standlee & Associates. He has worked on architectural projects, including field testing of wall and floor/ceiling systems, HVAC noise analysis, the specification and design of acoustic partitions, and acoustical treatments in churches, movie theaters, offices, apartment buildings, hospitals, and schools. His environmental noise studies include mine and quarry sites, light rail, highway and roadway noise, along with power and industrial facilities.

Ben uses 3D acoustic modeling software to provide a detailed analysis and recommendations for room acoustics, sound distribution, and speech intelligibility. As part of his master's thesis, he modeled accurate acoustical representations of several famous music performance venues allowing musicians to hear their performance simulated in those spaces, in real time, as if they were standing on stage.

In his spare time, Ben plays bass trombone with a wide variety of local groups. He enjoys web design and recording live sound.

Professional Experience

- 2016-Present – Senior Acoustical Consultant, ABD Engineering & Design, Inc., Portland, Oregon
- 2012-2016 – Acoustical Consultant, Daly-Standlee & Associates, Portland, Oregon

Professional Memberships

- Acoustical Society of America
- National Council of Acoustical Consultants
- ASTM International, E33 Committee on Building and Environmental Acoustics
- Institute of Noise Control Engineering (INCE), Board-Certified Member

Education

- Master of Science in Architectural Sciences, Emphasis in Architectural Acoustics, Rensselaer Polytechnic Institute, Troy, New York, 2012
- Bachelor of Arts in Physics, Gustavus Adolphus College, St. Peter, Minnesota, 2011
- Bachelor of Arts in Music Performance, Gustavus Adolphus College, St. Peter, Minnesota, 2011.

Project Experience

- | | | |
|---|---|---|
| • South Cooper Mountain Apartments, Beaverton, OR | • Hermiston Schools (Theater Lane Elementary School, Rocky Heights Elementary School, High School Classroom Annex and CTE), Hermiston, OR | • Northwest Pipe Company, Open Office Acoustics, Vancouver, WA |
| • Wood Village Mixed Use, Wood Village, OR | • Dry Creek Landfill, Noise Study, Eagle Point, OR | • Columbia Shores Townhouses, Overlay Noise Study, Vancouver, WA |
| • Farmdale Apartments, North Hollywood, CA | • Kaiser Permanente, Sunnyside Medical Center, Clackamas, OR | • Wood Village Mixed Use, HUD Noise Study, Wood Village, OR |
| • L&M Industrial Fabrication, Lot Expansion Barrier Calculations, Tangent, OR | • United Natural Foods, Noise and Vibration Study, Ridgefield, WA | • Clackamas Federal Credit Union, Corporate Headquarters, Oak Grove, OR |
| • USANA Sciences Company, Packaging Area, Valley City, UT | • Threemile Canyon Farms, Generator Exhaust, Boardman, OR | |
| • TriMet, Columbia 10, Portland, OR | | |



ABD Engineering & Design
Architectural Acoustics • AV Design • Noise & Vibration



Quincey Smail is a Senior Acoustical Consultant, with a Master of Engineering in acoustics from Penn State. Quincey's expertise includes acoustical design, modeling and testing to provide thoughtful recommendations for a variety of project types from residential and mixed use to K-12, higher education to healthcare, workplace, environmental, and industrial facilities. Quincey earned his Board Certification by the Institute of Noise Control Engineering (INCE) in 2022.

His projects include noise studies of manufacturing equipment in the US and Europe, car wash sites with residential adjacencies, and high-profile commercial locations.

Quincey's musical background has served him and his projects well in performance spaces including the Interlochen Center for the Arts, as well as other public and private music schools, music stores, event centers, plus the particular needs of worship spaces. Quincey is regularly called upon to assist with hotel acoustical needs during design and construction, along with post-occupancy needs. He has also worked with hospitals, hospice, counseling centers, dental offices, and residential healthcare to address FGI and HIPAA requirements.

In his free time, Quincey – a talented baritone – sings in community and church choirs. He can be found enjoying the Grand Rapids local craft-brewery and cocktail culture, trivia nights, and playing tabletop games.

Professional Experience

- 2016-Present – Senior Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2015-2016 – Lead Producer, Penn State University, State College, Pennsylvania
- 2012-2013 – Physics Lab Assistance, Central College Physics Department, Pella, Iowa

Professional Memberships

- Acoustical Society of America
- American Society of Testing and Materials
- National Council of Acoustical Consultants
- Institute of Noise Control Engineering (INCE), Board-Certified Member
- Boy Scouts of America, Eagle Scout

Education

- Master of Engineering in Acoustics, Pennsylvania State University, State College, Pennsylvania, 2016
- Bachelor of Arts in Physics, Minors in Mathematics, Music, and German, Central College, Pella, Iowa, 2013.

Project Experience

- | | | |
|--|--|---|
| • Public Museum, Grand Rapids, MI | • Riverview Church, Auditorium, Holt, MI | • Forslund Condominium, Impact Isolation, Grand Rapids, MI |
| • Courtyard Marriott, Detroit, MI | • 212 River Residential Mixed-Use, Holland, MI | • Domino's Pizza, Boardroom and Warehouse Open Office, Ann Arbor, MI |
| • Essity Operations Gennep, Netherlands | • Jefferson Lofts Condominium Association, Noise Isolation, St. Joseph, MI | • Interlochen Center For The Arts, Kresge Amphitheater, Interlochen, MI |
| • Tri County Area Schools, Cafetorium, Howard City, MI | • West Ottawa Public Schools, Performing Arts Center, Holland, MI | • Grand Valley State University, Product Design and Robotics Studio, Grand Rapids, MI |
| • Nestle Production Studio, Solon, OH | • Warner Norcross & Judd, Office Acoustics, Detroit, Grand Rapids, and Kalamazoo, MI | • Ford Motor Company, Conference & Event Center, Dearborn, MI |
| • Bendix, Relocation Noise and Vibration, Avon, OH | • Tommy Car Wash Systems, Car Wash Noise Study, Hudsonville and Flint, MI | • Opera Grand Rapids, Grand Rapids, MI |
| • Western Michigan University, Dunbar Hall, Kalamazoo, MI | | |
| • Western Michigan University, College of Aviation, Battle Creek, MI | | |





John Kramer is an acoustical consultant, with a Master of Architectural Engineering from University of Nebraska, Lincoln. John's passion for music and performing arts led to his interest in acoustics and helping to create efficient, comfortable, and healthy acoustical environments. John leverages his experience in acoustics and building systems with an applied background in noise and vibration control in his project work.

John has excelled with both professional and student design teams, including a 1st place finish in the 2020 ASHRAE Student Design Competition (System Selection). He has designed mechanical systems on projects including secure government facilities, corporate headquarters, large scale healthcare, and education. Since joining ABD, John has begun working on projects across the country from wind turbine noise studies to residential acoustics. John is building his experience with acoustically sensitive spaces including: Healthcare, K-12 Schools, Churches, Corporate Offices, and Social Halls, and is quickly developing as a consultant.

In John's spare time he enjoys playing guitar and singing, playing chess, collecting comic books, and is learning his way around West Michigan.

Professional Experience

- 2021-Present – Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2019-2021 – Mechanical Engineering Intern, HDR, Omaha, Nebraska

Professional Memberships

- Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

Education

- Master of Architectural Engineering, University of Nebraska, Lincoln, NE, 2021.
- Bachelor of Science of Architectural Engineering, University of Nebraska, Lincoln, NE, 2020.

Project Experience

- | | | |
|---|--|--|
| • Oregon State University
Fairbanks Hall
Corvallis, OR | • Corewell Health Ambulatory
Grand Rapids, MI | • Kellogg's Headquarters
Battle Creek, MI |
| • Minot State University
Hartnett Hall
Minot, ND | • PeaceHealth Riverbend
Springfield, OR | • LinkedIn Detroit
Detroit, MI |
| • Sinclair Community College
Distance Learning
Dayton, OH | • Portland Providence Medical
Center Main Emergency
Department
Portland, OR | • Disability Advocates of Kent
County
Grand Rapids, MI |
| • Grand Rapids Community
College Secchia Institute for
Culinary Education
Grand Rapids, MI | • Interlochen Center for the Arts
Interlochen, MI | • Wolverine Worldwide Broadcast
Studio
Rockford, MI |
| • Oregon Health and Science
University Dispatch
Portland, OR | • Jackson Hole Classical Academy
New High School
Jackson Hole, WY | • Cannon Muskegon Noise Study
Muskegon, MI |
| | • Hudsonville Christian School
Hudsonville, MI | • Grand Rapids Public Museum
Grand Rapids, MI |
| | • Wheaton Academy
West Chicago, IL | • Southtown Guitar
Grand Rapids, MI |



Faulkner Bodbyl-Mast is an audiovisual and acoustical consultant, having earned a bachelor's degree in Sound Engineering, with a minor in Electrical Engineering. Faulkner is an AVIXA Certified Technical Specialist (CTS). You might work with him in either or both capacities at ABD.

Faulkner's interest in sound came from his passion for music. He started attending Grand Rapids Symphony Orchestra concerts as a child and developed as an instrumentalist through grade school and high school, picking up the euphonium and carrying it into college. Once exposed to electronic music, Faulkner's interest shifted from performance to technical arts. He combined his early musical training with technology and blossomed into composing, recording, and music production. Faulkner provided sound design for live theater productions and began 3D sound modeling to

create sound design for video games.

Acoustics and AV go together, as the inherent quality of the built environment is designed and tuned by engineering and supported and enhanced by the electronics. Faulkner notes the acoustics of a space and systems within it must compliment each other or they will undermine each other.

Aside from his work in acoustics and audiovisual design, Faulkner is passionate about music. Gifted in composing, performing, and recording electronic pieces, you might find his compositions on SoundCloud.

Professional Experience

- 2022-Present – Audiovisual & Acoustical Consultant, ABD Engineering & Design, Inc., Grand Rapids, Michigan
- 2022 - Acoustical Intern, Kirkegaard, Chicago, Illinois
- 2019-2022 – Media Assistant, Duderstadt Center, Ann Arbor, Michigan
- 2019-2022 – Audio Director, Composer, Sound Designer, Wolverine Soft Studio, Ann Arbor, Michigan

Professional Memberships and Certifications

- AVIXA (InfoComm International), Certified Technical Specialist
- CTS
- Audio Engineering Society
- American Institute of Architects, Professional Affiliate
- National Council of Acoustical Consultants

Education

- Bachelor of Science in Sound Engineering, minor Electrical Engineering, University of Michigan, Ann Arbor, 2022.

Project Experience

- | | | |
|---|---|---|
| • Hope College
Dewitt Center for Economics and Business, Holland, MI | • City of Troy Council Chambers
Troy, MI | • Amity Middle School and High School
Amity, OR |
| • Oregon State University
Fairbanks Hall
Corvallis, OR | • Portland Art Museum Rothko Pavilion, Portland, OR | • Spokane Pubic Schools
Lewis and Clark High School
Spokane, WA |
| • Oregon State University
Student Success Center
Corvallis, OR | • Rogue Credit Union Community Complex Sports and Events
Medford, OR | • NAMI Oregon
Portland, OR |
| • Columbia Gorge Community College Nursing SIM Lab
The Dalles, OR | • Wheaton Academy
West Chicago, IL | • Peace Church
Middleville, MI |
| • Hillsboro Civic Center
Hillsboro, OR | • St Paul Center
Steubenville, OH | • Gardens of Sun City Senior Living, Sun City, AZ |
| • Chehalem Cultural Center
Newberg, OR | • Ben Davis High School
Indianapolis IN | • Senior Living
Peoria AZ |
| | • Potter Elementary School
Flint, MI | • Happy Valley Library
Happy Valley, OR |
| | • Illiana Christian High School
Lansing, IL | |



Lauren Slattery is an acoustical consultant newly located in Portland, OR. She is a graduate of Belmont University where she earned her bachelor's of science degree in Audio Engineering Technology, with a Physics minor.

Lauren comes to ABD Engineering & Design directly from her internships at NASA Ames Research Center and NASA Marshall Space Flight Center, where she performed acoustical testing and assisted with acoustical aspects of aircraft, satellites, engines, and their components. Lauren is building her architectural acoustical experience through mentoring with ABD staff. She is proving to be a quick study and is taking on her own project work.

Lauren describes herself as outdoorsy and enjoys hiking, climbing, and kayaking. She loves road trips and travel, reading, and baking - especially pastries.

Professional Experience

- 2024-Present – Acoustical Consultant, ABD Engineering & Design, Inc., Portland, Oregon
- 2024 – Acoustic Support Intern, NASA Ames Research Center, Mountain View, California
- 2023-2024 – Acoustic Test Support Intern, NASA Marshall Space Flight Center, Huntsville, Alabama
- 2021-2024 – Audiovisual Technician, Columbus Zoo and Aquarium, Columbus, Ohio
- 2022 – School of Music Audio Crew, RF Technician, Stagehand, Belmont University, Nashville, Tennessee

Education

- Bachelors of Science: Audio Engineering Technology, Physics Minor: Belmont University, Nashville, TN, 2023

Professional Certifications

- ProTools User Certified
- Dante Certification 3

Professional Memberships

- Audio Engineering Society
- Women in Audio
- Acoustical Society of America
- Institute of Noise Control Engineering (INCE)
- American Society of Testing and Materials
- National Council of Acoustical Consultants

Project Experience

- | | | |
|--|---|---|
| • Oregon State University
Corvallis, Magruder Hall,
Corvallis, OR | • Colonia de Valle Prospero,
Affordable Housing,
Albany, OR | • Wind Tunnel Acoustic Data
Processing,
Mountainview, CA |
| • Sous La Rose Social Club and
Event Space,
Portland, OR | • RogueX Credit Union Community
Complex, Aquatics, Sports, and
Events Center
Medford, OR | • Ocean Way Recording Studios,
Final Recording Project for
Studio Recording II
Nashville, TN |
| • Micronesian Islander
Community's Voyagers' Village,
Affordable Housing,
Salem, OR | • Acoustic Test Stand Design,
Mountainview, CA | • Foley and ADR group recording
project
Nashville, TN |

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